

REMARKS

Claims 1-5, 7-18, 20, and 22-30 are presently pending in the application. Applicant has amended claims 1, 4, 5, 20, 22, 24, 28, 29 and 30 and cancelled claims 2, 3 and 23. Applicant requests further examination and reconsideration of the application in view of the following arguments and the foregoing amendments.

Applicant has cancelled claims 2, 3, and 23 without prejudice. Accordingly, applicant submits that the rejections to claims 2, 3, and 23 are now moot.

I. Claims 1-5, 7, 12-17, 20, 22-26 and 28

Claims 1-5, 7, 12-17, 20, 22-26 and 28 were rejected under 35 U.S.C. 103(a) based on Beier et al. (4,571,681) hereinafter Beier (681), Murry et al. (4,156,187) hereinafter Murry, and Beier et al. (4,305,126) hereinafter Beier (126).

Applicant respectfully submits that no proper motivation has been identified for the proposed combination of Beier (681), Murry, and Beier 126.

Referring to Beier (681), the reference is directed to a switching arrangement for controlling instruments. Referring to Figure 1, the switching arrangement utilizes a control data memory 7 and a data router 10 to determine which of instruments I, II, II, and IV have been withdrawn from its holder. A control component 12 is coupled to the data router 10 and a foot actuated voltage supply 75. The control component 12 supplies a variable voltage level of 1-10 volts to the control elements 42, 43, 44, 45 to control operation of the instruments utilizing the voltage supply. See column 2, lines 9-13, column 5, lines 17-24, and Figure 1 of Beier (681). Applicant further notes that the "object" of the Beier (681) system is to supply a variable voltage level to the control elements for variable control of the devices. See column 2, lines 9-13 of Beier (681).

Referring to Murry, Figure 13 illustrates a transmitter having an ultrasonic transducer 288 coupled to an oscillator 282. The oscillator 288 induces the ultrasonic transducer 288 to output ultrasonic energy at different output frequencies, where each frequency corresponds to a different device to be controlled by an ultrasonic receiver. It should be noted that no information values are transmitted in the ultrasonic energy. A receiver 290 having an ultrasonic transducer 291 detects the ultrasonic energy and a frequency detector 293 turns on a first device when it receives a first frequency and the frequency detector 294 turns on a second device when it receives a second frequency. See column 19, lines 67-68 and column 20, lines 1-7 of Beier (681).

Assuming that the transmitter and receiver of Murry were somehow combined with the switching arrangement of Beier (681), applicant submits that the combination would destroy the functionality of the switching arrangement of Beier (681). As discussed above, the primary purpose of the foot actuated voltage supply 75 is to supply a variable output voltage to the control elements 42, 43, 44, 45 to control operation of the instruments. As discussed above, the transmitter of Murry can merely transmit ultrasonic energy having different frequencies for selecting different devices. Thus, the transmitter does not include any information in the ultrasonic energy, for variably controlling operation (e.g., variably controlling speed) of the instruments as required by Beier (681). Thus, the combination of Beier (681) and Murry would destroy the functionality of Beier (681), because the instruments could not be variably controlled. Further, even if the teachings of Beier (126) were utilized in the proposed combination, the functionality of Beier (681) would still be destroyed, because the instruments could not be variably controlled as required by the teachings of the Beier (681).

Because the proposed combination of Beier (681), Murry, and Beier (126) would destroy the functionality of Beier (681), applicant submits that no proper motivation has been identified for the proposed combination. Because no proper motivation has been identified for the proposed combination, applicant submits that the rejection of claims 1, 4, 5, 7, 12-17, 20, 22, 24-26 and 28 based on Beier (681), Murry, and Beier (126) is improper.

Further, applicant submits that the combination of Beier (681), Murry, and Beier (126) do not teach each and every limitation of claims 1, 4, 5, 7, 12-17, 20, 22, 24-26 and 28.

Referring to independent claim 1, as amended, the claim recites in part:

“a first microprocessor operatively associated with the foot pedal unit and an RF transmitter, the first microprocessor configured to determine whether at least a first device or a second device is selected, the first microprocessor further configured to induce the RF transmitter to transmit a first RF signal in response to at least partial displacement of the moveable member when the first device is selected, the first RF signal having a first identifier value, the first microprocessor further configured to induce the RF transmitter to transmit a second signal in response to at least partial displacement of the moveable member when the second device is selected, the second RF signal having a second identifier value; and

a first device actuation unit configured to receive the first RF signal, the first device actuation unit further configured to compare the first identifier value to a first predetermined value associated with the first device, the first device actuation unit further configured to actuate the first device when the first identifier value corresponds to the first predetermined value.”

Referring to Beier (681), Murry, and Beier (126), applicant respectfully submits that the proposed combination does not provide any teaching of: “the first microprocessor configured to induce the RF transmitter to transmit a first RF signal in response to at least partial displacement of the moveable member when the first device is selected”, as recited in claim 1. Referring to Murry, the reference does include the statement: “The foot switch 94 operates similar to the wireless control 86 which is, however, a remote R.F. Transmitter, while in the model illustrated in Figure. 3 a cable 96 hard-wire connects the control 94 to the machine 91.” See column 14, lines 31-35 of Murry. Applicant notes, however, that the term R.F. is not defined in Murry. Accordingly, applicant submits that it is not clear whether the term “R.F.” corresponds to the words “remote function”, “remote frequency”, “radio frequency”, or some other word combination. Further, Murry provides numerous statements that indicate that the foot switch 94 does not transmit radio frequency signals, but instead

transmits ultrasonic (e.g., pressure wave) signals. In particular, Murry indicates that "Fig. 13 is a block diagram of the transmitter part of the ultrasonic system for wireless control of the various subsystems." See column 9, lines 66-68. Further, Murry indicates that the foot switch 94 operates similar to wireless control 86. Further, Murry indicates: "... wireless switch 86 includes an ultrasonic transmitter for radiating control signals to the medical unit 60 rather than via the hard wiring as shown in Figure 3." See column 19, lines 48-51 of Murry. Still further, Murry indicates: "Fig. 14 comprises a receiver and includes an ultrasonic transducer 291 which detects the ultrasonic energy radiated from the transducer 288..." See column 19, lines 67-68 to column 20 lines 1-2 of Murry. Further, Murry does not provide any teaching of a radio frequency transmitter configured to receive radio frequency signals. Accordingly, applicant respectfully submits that Murry does not provide any clear teaching of the transmission of a radio frequency signal in response to at least partial displacement of the moveable member when the first device is selected, as recited in claim 1.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) do not provide any teaching of "the first RF signal having a first identifier value." In contrast, referring to Figure 13 of Murry, an oscillator 282 induces the ultrasonic transducer 288 to output ultrasonic energy at different output frequencies, where each frequency corresponds to a different device to be controlled by an ultrasonic receiver. However, the ultrasonic energy does not have a first identifier value therein associated with the first device as recited in claim 1.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) do not provide any teaching of: "the first microprocessor further configured to induce the RF transmitter to transmit a second signal in response to at least partial displacement of the moveable member when the second device is selected", as recited in claim 1.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) do not provide any teaching of: "the second RF signal having a second identifier value", as recited in claim 1.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) do not provide any teaching of: “a first device actuation unit configured to receive the first RF signal.” In particular, applicant notes that Murry does not even mention use of a device configured to receive an RF signal. Instead, Murry indicates "receiver... includes an ultrasonic transducer 291 which detects the ultrasonic energy radiated from the transducer 288 and supplies it to an amplifier. The output of the amplifier is supplied to a frequency detector 293 which detects a first frequency and supplies an output to control the aspirator control 297." See column 19, lines 67-68 to column 20, lines 1-5 of Murry.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) do not provide any teaching of: “the first device actuation unit further configured to compare the first identifier value to a first predetermined value associated with the first device...”, as recited in claim 1.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) do not provide any teaching of: “the first device actuation unit further configured to actuate the first device when the first identifier value corresponds to the first predetermined value.” as recited in claim 1.

Referring to independent claim 22, as amended, the claim recites in part:

“...inducing an RF transmitter to transmit a first RF signal having a first identifier value in response to at least partial displacement of a moveable member on a foot pedal unit when the first device is selected, utilizing the microprocessor;...

inducing the RF transmitter to transmit a second RF signal having a second identifier value in response to at least partial displacement of the moveable member on the foot pedal unit when the second device is selected, utilizing the microprocessor;

receiving the first RF signal at a device actuation unit;

comparing the first identifier value to a first predetermined value associated with the first device; and

controlling the first device utilizing the device actuation unit based on the first RF signal when the first identifier value corresponds to the first predetermined value associated with the first device.

After carefully reviewing Beier (681), Murry and Beier (126), applicant respectfully submit that the references do not provide any teaching of: “inducing an RF transmitter to transmit a first RF signal having a first identifier value in response to at least partial displacement of a moveable member on a foot pedal unit when the first device is selected, utilizing the microprocessor” as recited in claim 22.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) does not provide any teaching of: “inducing the RF transmitter to transmit a second RF signal having a second identifier value in response to at least partial displacement of the moveable member on the foot pedal unit when the second device is selected, utilizing the microprocessor”, as recited in claim 22.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) does not provide any teaching of: “receiving the first RF signal at a device actuation unit”, as recited in claim 22.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) does not provide any teaching of: “comparing the first identifier value to a first predetermined value associated with the first device”, as recited in claim 22.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) does not provide any teaching of: “controlling the first device utilizing the device actuation unit based on the first RF signal when the first identifier value corresponds to the first predetermined value associated with the first device”, as recited in claim 22.

Accordingly, because the proposed combination of Beier (681), Murry and Beier (126) does not teach each and every limitation of independent claims 1 and 22, and claims 4, 5, 7, 12-17, 20, 24-26 and 28, which depend from at least one of claims 1 and 22, applicant submits that claims 1, 4, 5, 7, 12-17, 20, 22, 24-26 and 28 are allowable over these references.

II. Claims 8-11

Claims 8-11 were rejected under 35 U.S.C. 103(a) based on Beier (681), Murry, Beier (126) and Jones et al. (4,114,275) hereinafter Jones. Claims 8-11 depend from independent claim 1 and therefore include all of the limitations of claim 1.

Applicant respectfully submits that Beier (681), Murry, Beier (126) do not provide any teaching of: “a first microprocessor operatively associated with the foot pedal unit and an RF transmitter, the first microprocessor configured to determine whether at least a first device or a second device is selected, the first microprocessor further configured to induce the RF transmitter to transmit a first RF signal in response to at least partial displacement of the moveable member when the first device is selected, the first RF signal having a first identifier value, the first microprocessor further configured to induce the RF transmitter to transmit a second signal in response to at least partial displacement of the moveable member when the second device is selected, the second RF signal having a second identifier value.”, as recited in claims 1 and 8-11. Applicant further submits that Jones does not provide any teaching of the foregoing limitations.

Further, applicant respectfully submit that Beier (681), Murry, Beier (126) do not provide any teaching of: “a first device actuation unit configured to receive the first RF signal, the first device actuation unit further configured to compare the first identifier value to a first predetermined value associated with the first device, the first device actuation unit further configured to actuate the first device when the first identifier value corresponds to the first predetermined value” as recited in claims 1 and 8-11. Applicant further submits that Jones does not provide any teaching of the foregoing limitations.

Accordingly, because the proposed combination of Beier (681), Murry, Beier (126) and Jones do not teach each and every limitation of independent claim 1, and claims 8-11 which depend from claim 1, applicant submits that claims 8-11 are allowable over these references.

III. Claims 18 and 27

Claims 18 and 27 were rejected under 35 U.S.C. 103(a) based on Beier (681), Murry, Beier (126), and Fornoff et al. (5,931,669) hereinafter Fornoff. Claims 8 and 27 depend from independent claims 1 and 22, respectively, and therefore include all of the limitations of claims 1 and 22, respectively.

Applicant respectfully submits that Beier (681), Murry, Beier (126) do not provide any teaching of: “a first microprocessor operatively associated with the foot pedal unit and an RF transmitter, the first microprocessor configured to determine whether at least a first device or a second device is selected, the first microprocessor further configured to induce the RF transmitter to transmit a first RF signal in response to at least partial displacement of the moveable member when the first device is selected, the first RF signal having a first identifier value, the first microprocessor further configured to induce the RF transmitter to transmit a second signal in response to at least partial displacement of the moveable member when the second device is selected, the second RF signal having a second identifier value.”, as recited in claims 1 and 18. Applicant further submits that Fornoff does not provide any teaching of the foregoing limitations.

Further, applicant respectfully submit that Beier (681), Murry, Beier (126) do not provide any teaching of: “a first device actuation unit configured to receive the first RF signal, the first device actuation unit further configured to compare the first identifier value to a first predetermined value associated with the first device, the first device actuation unit further configured to actuate the first device when the first identifier value corresponds to the

first predetermined value” as recited in claims 1 and 18. Applicant further submits that Fornoff does not provide any teaching of the foregoing limitations.

Accordingly, because the combination of Beier (681) et al., Murry, Beier (126), and Fornoff do not teach each and every limitation of independent claim 1, and claim 18 which depends from claim 1, applicant submits that claim 18 is allowable over these references.

Applicant respectfully submits that the references do not provide any teaching of: “inducing an RF transmitter to transmit a first RF signal having a first identifier value in response to at least partial displacement of a moveable member on a foot pedal unit when the first device is selected, utilizing the microprocessor” as recited in claims 22 and 27. Applicant further submits that Fornoff does not provide any teaching of the foregoing limitations.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) do not provide any teaching of: “inducing the RF transmitter to transmit a second RF signal having a second identifier value in response to at least partial displacement of the moveable member on the foot pedal unit when the second device is selected, utilizing the microprocessor”, as recited in claims 22 and 27. Applicant further submits that Fornoff does not provide any teaching of the foregoing limitations.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) do not provide any teaching of: “receiving the first RF signal at a device actuation unit”, as recited in claims 22 and 27. Applicant further submits that Fornoff does not provide any teaching of the foregoing limitations.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) do not provide any teaching of: “comparing the first identifier value to a first predetermined value associated with the first device”, as recited in claims 22 and 27. Applicant further submits that Fornoff does not provide any teaching of the foregoing limitations.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) does not provide any teaching of: “controlling the first device utilizing the device actuation unit based on the first RF signal when the first identifier value corresponds to a first predetermined value associated with the first device”, as recited in claims 22 and 27. Applicant further submits that Fornoff does not provide any teaching of the foregoing limitations.

Accordingly, because the proposed combination of Beier (681), Murry and Beier (126) does not teach each and every limitation of independent claim 22, and claim 27 which depends from claim 22, applicant submits that claim 27 is allowable over these references.

IV. Claims 29 and 30

Claims 29 and 30 were rejected under 35 U.S.C. 103(a) based on Beier (681) et al., Murry, Beier (126), and Nash (4,171,572). Claims 29 and 30 depend from independent claims 1 and 22, respectively, and therefore include all of the limitations of claims 29 and 30, respectively.

Applicant respectfully submits that the combination of Beier (681), Murry, Beier (126) does not provide any teaching of: “a first microprocessor operatively associated with the foot pedal unit and an RF transmitter, the first microprocessor configured to determine whether at least a first device or a second device is selected, the first microprocessor further configured to induce the RF transmitter to transmit a first RF signal in response to at least partial displacement of the moveable member when the first device is selected, the first RF signal having a first identifier value, the first microprocessor further configured to induce the RF transmitter to transmit a second signal in response to at least partial displacement of the moveable member when the second device is selected, the second RF signal having a second identifier value.”, as recited in claims 1 and 29. Applicant further submits that Nash does not provide any teaching of the foregoing limitations.

Further, applicant respectfully submit that the combination of Beier (681), Murry, Beier (126) does not provide any teaching of: “a first device actuation unit configured to receive the first RF signal, the first device actuation unit further configured to compare the first identifier value to a first predetermined value associated with the first device, the first device actuation unit further configured to actuate the first device when the first identifier value corresponds to the first predetermined value” as recited in claims 1 and 29. Applicant further submits that Nash does not provide any teaching of the foregoing limitations.

Accordingly, because the combination of Beier (681) et al., Murry, Beier (126), and Nash does not teach each and every limitation of independent claim 1 and claim 29 which depends from claim 1, applicant submits that claim 29 is allowable over these references.

Applicant respectfully submit that the combination of Beier (681), Murry and Beier (126) does not provide any teaching of: “inducing an RF transmitter to transmit a first RF signal having a first identifier value in response to at least partial displacement of a moveable member on a foot pedal unit when the first device is selected, utilizing the microprocessor” as recited in claims 22 and 30. Applicant further submits that Nash does not provide any teaching of the foregoing limitations.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) does not provide any teaching of: “inducing the RF transmitter to transmit a second RF signal having a second identifier value in response to at least partial displacement of the moveable member on the foot pedal unit when the second device is selected, utilizing the microprocessor”, as recited in claims 22 and 30. Applicant further submits that Nash does not provide any teaching of the foregoing limitations.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) does not provide any teaching of: “receiving the first RF signal at a device actuation unit”, as

recited in claims 22 and 30. Applicant further submits that Nash does not provide any teaching of the foregoing limitations.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) does not provide any teaching of: "comparing the first identifier value to a first predetermined value associated with the first device" as recited in claims 22 and 30. Applicant further submits that Nash does not provide any teaching of the foregoing limitations.

Applicant further submits that the combination of Beier (681), Murry and Beier (126) does not provide any teaching of: "controlling the first device utilizing the device actuation unit based on the first RF signal when the first identifier value corresponds to the first predetermined value associated with the first device", as recited in claims 22 and 30. Applicant further submits that Nash does not provide any teaching of the foregoing limitations.

Accordingly, because the proposed combination of Beier (681), Murry and Beier (126) does not teach each and every limitation of independent claim 22, and claim 30 which depends from claim 22, applicant submits that claim 30 is allowable over these references.

V. CLAIMS 1-5, 7, 12-18, 20, 22-28

Claims 1-5, 7, 12-18, 20 and 22-28 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over copending application No. 10/464,369 in view of Beier (126). Applicant has submitted herewith a terminal disclaimer that obviates the foregoing provisional rejection.

Claims 8-11 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over copending application No.

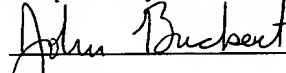
10/464,369 in view of Beier (126) and Jones. Applicant has submitted herewith a terminal disclaimer that obviates the foregoing provisional rejection.

Claims 29 and 30 were provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over copending application No. 10/464,369 in view of Beier (126) and Nash. Applicant has submitted herewith a terminal disclaimer that obviates the foregoing provisional rejection.

VI. CONCLUSION

For the above-cited reasons, all the claims presently pending in this application are believed to be allowable. If the Examiner has any questions regarding this matter, he is invited to call the applicant's under signed attorney.

Respectfully submitted,



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